The Pneumatic-Tyre K-124 Crane With Hydraulic Controls

S/193/60/000/010/011/015
A004/A001

Table:

The following technical data are given: longitudinal chassis base - 3,400 mm; height during transportation - 4,047 mm; radius described by the swivel part - 3,050 mm; total length (during transportation) - 14,000 mm; maximum width - 3,700 mm; track gage - 2.9 m; maximum pressure on each wheel (during operation) - 8.21 tons; maximum hill-climbing capacity - 10°; traveling speed when being towed - 15 km/hour; load-lifting speeds - 4.4 - 67.5 m/min; load-lowering speeds - 2.13 - 32.85 m/min; traveling speeds - 0.985 - 10 km/hour; lifting of boom - 300 - 475 sec; crane weight (with 10-m boom) - 21.5 tons. The author claims that the K-124 crane, compared with similar cranes of foreign make, has a relatively great moment of load (50.4 ton · meter) combined with a low weight (weight-to-moment of load ratio = 0.427 t·m) and the lowest installed engine power (55 hp). There is 1 figure and 1 table.

Card 4/4

CHERNETSKIY, G.I.; SIPITINER, Yu.B.

Die for bending collars. Mashinostroitel' no.11:19 N '60.

(MIRA 13:10)

(Dies (Metalworking))

84810

S/100/60/000/008/002/002
A053/A029

AUTHOR: Chernetskiy, G.I., Engineer

TITLE: New 40-Ton Diesel-Electric Crane on Pneumatic Tires

PERIODICAL: Mekhanizatsiya stroitel'stva, 1960, Nr. 8, pp. 27-28

TEXT: The Plant imeni Yanvarskogo Vosstaniya has turned out a trial mo-
del of a new Diesel-electric crane on pneumatic tires, К -401 (K-401) having a
lifting capacity of 40 tons. The power source is a 100-hp Diesel engine КДМ -
100 (KDM-100) and an a-c generator. The boom, which is equipped with an exten-
sion, permits a 5-ton load to be hoisted to a height of 30 m corresponding to a
6-story building. The K-401 has a reduced wheel base capable of passing through
a gate 4 m wide. The 2-speed gear-box in conjunction with a 2 speed a-c motor
and an electromagnetic clutch gives a wide range of speeds from 1.2 to 14 km/h.
The gear-box has a built-in differential. The hydraulic system of the crane is
equipped with a discharge valve which in case of emergency can disconnect the
system and return the oil without pressure to the reservoir. The hydraulic sys-
tem is controlled by standard slide valves. The electric drive on a-c has se-
veral advantages over the d-c drive; cost of electric equipment has been reduced
by 30 %; the same applies to weight and dimensions. The electric motor can be

Card 1/2

84810

S/100/60/000/008/002/002
A053/A029

New 40-Tons Diesel-Electric Crane on Pneumatic Tires

fed from an outside source of 3-phase current. The crane can also be used as movable power station. To eliminate certain feeds selenium rectifiers which in turn furnish d-c required for the 2-phase electric motor during brake action; this action is required to reduce the speed when lowering load and putting it down gently. The crane is fitted with a single-motor driving mechanism consisting of an asynchronous short-circuited 2-speed electric motor of series A. The moment of rotation of the motor is transmitted to the wheels of the crane by means of an asynchronous electromagnetic clutch and a 2-speed gear-box. The clutch consists of the inductor (driving part) and the armature (driven part). The former, made of cast steel, has the exciting winding and is rigidly connected to the shaft of the motor. Over the inductor the armature is mounted which is mechanically connected to the transmission gear-box. The revolving speed of the armature is controlled by changing the exciting current. The article gives the technical characteristics of the K-401 crane. There are 1 photograph and 1 table.

Card 2/2

SIPITINER, Yu.B., inzh.; CHERNETSKIY, G.I.; inzh.

The 40-ton K-401 crane equipped with pneumatic tires. Stroi. i dor.
mashinostr. 5 no.10:12-13 O '60.   (MIRA 13:10)
                        (Cranes, derricks, etc.)

SIPITINER, Yu.B., inzh.; CHERNETSKIY, G.I., inzh.

New K-255 crane with a lifting capacity of 25 tons. Stroi. i dor.
mash. 6 no.2:7 F '61.   (MIRA 14:5)
                         (Cranes, derricks, etc.)

CHERNETSKIY, G.I., inzh.

Hydraulic crane with pneumatic tires. Mekh. stroi. 18 no.2:22 F '61.
(MIRA 14:2)

1. Zavod im. Yanvarskogo vosstaniya.
(Cranes, derricks, etc.--Hydraulic drive)

CHERNETS'KIY, I.P.

Upper Cretaceous deposits in the northern region of the Dnieper-Donets Lowland between the Desna and Psel Rivers. Geol.zhur. 16 no.2:30-43 '56. (MLRA 9:9)

(Dnieper Lowland--Geology, Stratigraphic)
(Donets Basin--Geology, Stratigraphic)

CHERNETSKIY, I.S., elektromonter

Automatic machine for cutting and stacking green bricks. Sug-. gested by I.S.Chernetskii. Rats.i izobr.predl.v stroi. no.14: 39-41 '60. (MIRA 13:6)

1. Moskovskiy eksperimental'nyy keramicheskiy zavod, Moskva, Pervyy akademicheskiy pereulok, d.38.
(Brickmaking machinery)

CHERNETSKIY, K.V.

Electrokumographic study of the contractile function of the myocardium in rheumatism. Terap.arkh. 34 no.2:47-51 '62.

(MIRA 15:3)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir. - deystvitel'nyy chlen AMN SSSR prof. A.I. Nesterov) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.

(RHEUMATIC HEART DISEASE)   (ELECTROKYMOGRAPHY)
(HEART BEAT)

CHERNETSKIY, K.V.

Electrokymogram of the cardiac ventricles. Kardiologiia 3
no.3:73-79 My-Je '63.   (MIRA 16:9)

1. Iz fakul'tetskoy terapevticheskoy kliniki (direktor.- dey-
stvitel'nyy chlen AMN SSSR prof. A.I.Nesterov) II Moskov-
skogo meditsinskogo instituta imeni N.I.Pirogova.
                        (ELECTROKYMOGRAPHY)

CHERNETSKIY, N.M. (Khar'kov)

New textbook for a teacher ("Collection of construction problems in projective drawing" by I.A.Pol'skii. Reviewed by N.M. Chernetskii). Mat.v shkole no.4:89-90 Jl-Ag '60. (MIRA 13:9)
          (Mathematics--Study and teaching)
          (Pol'skii, I.A.)

AUTHORS: Trubilov, M. A., Candidate of Technical Sciences,
                Chernetskiy N. S., Engineer

TITLE: New Methods of Starting Up Steam Turbines
                (Novyye metody puska parovykh turbin)

PERIODICAL: Energetik, 1959, Nr 2, pp 33 - 37 (USSR)

ABSTRACT: The authors describe the so-called "blochnyy" (block)
                methods of starting up steam turbines, introduced by the
                southern section of ORGRES and tested on VK-120-2 steam
                turbines by VTI and LMZ. Basically, the new methods differ
                from the conventional method in that all steam cut-off
                members of the steam pipes from boiler to turbine are open
                and all drainage outlets, with exception of drainage con-
                nected with the condenser, are closed when the block
                (boiler-turbine) is being started. Application of new

Card 1/2

SOV/91-59-2-25/33

New Methods of Starting Up Steam Turbines

        methods of starting-up turbines results in a considerable
reduction in starting time and precludes the development
of high thermal stresses in the turbine's structure. There
are three graphs and 1 Soviet reference.

Card 2/2

TRUBILOV, M.A., kand. tekhn. nauk; CHERNETSKIY, N.S., inzh.; PROKHOROV, S.A.,
inzh.

Temperature regime of the front packing bushings in the IMZ-series
high pressure turbine under operating conditions. Teploenergetika 6
no.12:30-38 D '59.   (MIRA 13:3)

1.Vsesoyuznyy teplotekhnicheskiy institut.
                (Steam turbines)

CHERNETSKIY, N.S., kand. tekhn. nauk; PETROSYAN, R.A.;
    LEYZEROVICH, A.Sh., inzh.; VOLKOV, I.I.

    Determination of technical and economic indices of the operation
    of a 200 Mw. block using a control computer. Teploenergetika 11
    no.7:20-24 Jl '64.   (MIRA 17:8)

    1. Vsesoyuznyy teplotekhnicheskiy institut.

CHERNETSKIY, N.S.

Reasons for using two-shaft turbines with different angular
shaft velocities. Energetik 12 no.10:26-27 O '64.

(MIRA 17:11)

CHERNETSKIY, N.M. (Khar'kov)

Determining the simplicity of some geometrical constructions.
Mat.v shkole no.5:30-36 S-O '62.   (MIRA 15:12)
          (Geometry, Plane—Problems, exercises, etc.)

CHERNETSKIY, N. S.

Cand Tech Sci - (diss) "Study of starting processes of steam
high-pressure turbines." Moscow, 1961. 26 pp; (Ministry of
Higher and Secondary Specialist Education RSFSR, Moscow Order
of Lenin Power Inst); 150 copies; free; (KL, 6-61 sup, 227)

CHERNETSKIY, O.Ye.

Organization and analysis of the work of a first aid station.
Zdrav. Ros. Feder. 5 no.1:31-33 Ja '61.   (MIRA 14:1)

1. Glavnyy vrach Belokalitvenskoy rayonnoy bol'nitsy.
   (BELAYA KALITVA—FIRST AID IN ILLNESS AND INJURY)

CHERNETSKIY, O.Ye.; MILOVANOVA, A.Kh.

Statistical reports of the medical and obstetrical station.
Zdravookhranenie 6 no.3:14-17 My-Je'63 (MIRA 16:11)

1. Glavnyy vrach Belokalitvenskoy rayonnoy bol'nitsy, Ros-
tovskaya oblast' (for Chernetskiy). 2. Rayonnyy pediatr Belo-
kalitvenskogo rayona, Rostovskaya oblast' (for Milovanova).

CHERNETSKIY, O.Ye. (Belaya Kalitva)

Organization of work for the reduction of abortions. Sov. zdrav.
20 no.6:20-22 '61.   (MIRA 14:7)

1. Glavnyy vrach Belokalitvenskoy rayonnoy bol'nitsy.
                    (ABORTION)

CHERNETSKIY, O.Ye. (Belaya Kalitva)

    Work of a district hospital on training of medical personnel by
    correspondence. Sov. zdrav. 20 no.7:54-58 '61.   (MIRA 15:1)

    1. Iz Belo-Kalitvinskoy rayonnoy bol'nitsy.
      (BELAYA KALITVA DISTRICT—MEDICINE—STUDY AND TEACHING)

CHERNETSKIY, O.Ye.

Work practices in public health establishments in an enlarged rural district. Zdrav.Ros.Fed. 7 no.4:10-11 Ap '63.

(MIRA 16:4)

1. Glavnyy vrach Belokalitvenskoy rayonnoy bol'nitsy Rostovskoy oblasti.

(PUBLIC HEALTH, RURAL)

CHERNETSKIY T. I.

ALICHKIN, S.L.; AGRINSKIY, N.I.; ANDREYEV, G.F.; BAKUMENKO, G.D.;
    VORONTSOV, S.M.; VOYSTRIKOV, I.V.; GRADYUSHKO, G.M.; ZYKOV, A.V.
    IVANOVTSEV, P.V.; KINBURG, M.Ya.; KOVALEV, P.A.; KOZLOVSKIY, Ye.V.
    KORNIYENKO, A.P.; KOLYAKOV, Ya.Ye.; LAKTIONOV, A.M.; LEVADNYY, B.A.
    MEDVEDEV, I.D.; NOVIKOV, N.V.; ORLOV, F.M.; OSTROVSKIY, A.A.;
    ORTSEV, V.P.; PENIONZHKO, A.M.; POLOZ, D.D.; PRITULIN, P.I.;
    PETUKHOVSKIY, A.A.; ROGALEV, G.T.; RYBAK, P.Ya.; SUTYAGIN, G.P.
    TUKOV, R.A.; KHAVCHENKO, D.F.; CHERNETSKIY, T.I.; SHPAYER, N.M.
    SHUSTOVSKIY, F.A.

Nikolai Vasil'evich Spesivtsev. Veterinariia 35 no.2:96 F '58.
                                                    (MIRA 11:2)
            (Spesivtsev, Nikolai Vasil'evich, 1901-1957)

ALEKSANDROV, N.A., veter. vrach; MAKHOV, G.K., veter. vrach;
CHERNETSKIY, T.I., veter. vrach

Some characteristics of foot-and-mouth disease in swine.
Veterinariia 38 no.7:42-44 Jl '61.   (MIRA 16:8)

(Foot-and-mouth disease)
(Swine—Diseases and pests)

CHERNETSKIY, V.P., inzh.; CHECHERSKIY, D.M., inzh.; ZHARSKIY, S.G., inzh.; SOKOLOV, A.Ye., inzh.

Complex inoculant for cast iron. Mashinostroenie no.3:
25-26 My-Je '65.   (MIRA 18:6)

CHERNETSKIY, V.D., inzh.; YASHEK, L.N., inzh.; VERNIGORA, B.I., inzh.

Production of gears of magnesium cast iron. Mashinostroenie
no.1:65-66 Ja-F '64.   (MIRA 17:7)

ZUBOV, Vladimir Ivanovich; CHERNETSKIY, V.I., nauchnyy red.; KAZAROV,
Yu.S., red.; KONTOROVICH, A.I., tekhn.red.

[Mathematical methods for investigation of automatic control
systems] Matematicheskie metody issledovaniia sistem avto-
maticheskogo regulirovaniia. Leningrad, Gos.soiuznoe izd-vo
sudostroit. promyshl., 1959. 323 p.   (MIRA 12:7)
            (Automatic control)

CHERNETSKIY, V.I. (Leningrad)

Interpolation method for the analysis of the precision of automatic control systems with random disturbances. Avtom.i telem. 21 no.4:481-488 Ap '60.   (MIRA 13:6)
(Automatic control)

2hh07

/6,8000(1121, 1133, 1344)

S/024/61/000/002/005/014
E140/E163

AUTHOR: Chernetskiy, V. I. (Leningrad)

TITLE: Determination of probability distribution functions at
the output of nonlinear automatic-control systems

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniya tekhnicheskikh
nauk, Energetika i avtomatika, 1961, No.2, pp. 85-91

TEXT: In the study of real automatic-control systems non-
linear differential equations of random variables are encountered:

$$\frac{dY_i}{dt} = F_i(t, Y_1, Y_2, \ldots, Y_n, X_1, X_2, \ldots, X_m) \qquad (1.1)$$

$$(t = 0, \quad Y_i(0) = Y_{i0}, \quad i = 1, 2, \ldots, n)$$

where Y_{i0} $(i = 1, 2, \ldots, n)$ are random quantities characterizing
the random initial state of the control system; $X_1 = X_1(t)$,
$X_2 = X_2(t), \ldots, X_m = X_m(t)$ are random functions of time
characterizing fluctuations in the control system, external
perturbations and random deviations of the system parameters from
the designed values; and $Y_1, Y_2, \ldots, Y_n$ are the output
Card 1/3

Determination of probability distribution functions at the output
of nonlinear automatic-control systems

coordinates of the control system as functions of time.   Such
differential equations are stochastic. For each set of realiza-
tions of the random functions X_i and each set of random initial
conditions, the set of random functions Y_i will have a set of
realizations $y_i(\cdot)$.   The Y_i are termed by the author the
solution of Cauchy's problem for the system (1.1) in a
probabilistic sense.   The procedure followed is to determine
experimentally or theoretically the probability characteristics of
the random functions X_i and the random initial conditions Y_{i0},
and then to determine the probability characteristics of the
solution of the system of stochastic differential equations (1.1).
In the present paper the problem is solved for a more restricted
class of stochastic differential equations, in which the random
functions X_i are substituted to a given approximation by their
canonical expansions.   The solution is found in the form of
successive approximations, for which a proof of convergence is
given, but which is found to be rather slow in a numerical example.
Card 2/3

24407

S/024/61/000/002/005/014
E140/E163

Determination of probability distribution functions at the output
of nonlinear automatic-control systems

The author therefore concludes with the remark that for given
special classes of differential equations it will be necessary to
modify the method in order to increase the rate of convergence.
Acknowledgements are expressed to Ye.P. Popov for his advice.
There are 4 Soviet references.

SUBMITTED: January 16, 1961

Card 3/3

/6.8000 (4103, 4202)

AUTHORS: Chernetskiy, V.I., Yusupov, R.M. (Leningrad)

TITLE: On one type of self-adjusting control system

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye
            tekhnicheskikh nauk. Energetika i avtomatika.
            no.1, 1962, 158-165

TEXT: The authors describe a method for constructing an
optimizing, self-adjusting control system in the absence of full
information on the system structure and parameters.   In any case,
with full information the equations of any real system are so
complicated that they are unusable. Simplified equations must
therefore be used.   These equations are taken as the equations of
a m o d e l of the real system and the self-adjusting circuits are
designed to correct the coefficients of these equations.   The
correction is calculated on the assumption that during the
preceding time interval k n o w n disturbances have acted on the
controlled process and on the regulator.   The calculated
coefficients of the model are compared with the current values of
the system based on this simplified model and the differences used
Card 1/4

On one type ...

to correct the latter.   To construct the simplified model, the
first step is to replace the random factors in the real system
equations by their mathematical expectations.   This gives a
complicated system of equations (high order, presence of
nonlinearities, etc).   It is the authors' opinion that sufficient
information will be obtained for the action of the self-adjusting
circuits from a simplified model.   This gives the further
advantage that the magnitude of computation required will be
substantially reduced.   The simplified equations are constructed
in such a way that each coordinate vector of the control
parameters can be isolated in a separate equation, i.e. that the
regulator can be constructed of a number of independent channels,
one for each of the controlled variables.   The investigation is
then continued for a single such variable.   The equation
approximating the real process is then taken as

$$a_n(t) \frac{d^n x}{dt^n} + a_{n-1}(t) \frac{d^{n-1} x}{dt^{n-1}} + \ldots + a_0(t) x = \psi_s(t) \qquad t \in [t_0, T] \qquad (3.1)$$

Card 2/4

S/024/62/000/001/009/013
On one type ...   E140/E435

where $\ni$ is a subscript indicating the m o d e l. The authors
claim that placing all perturbations etc on the right-hand side of
the equation and referring them to the model permits them to be
taken into account indirectly, through the values of the
parameters a_i, as adjusted by the self-adjustment system. For
example, if only some of the a_i depend substantially on the
regulator parameters, the terms containing the others can be
brought to the right-hand side

$$a_{m-1}(t)\frac{d^{m-1}x}{dt^{m-1}} + \dots a_0(t)x = \psi_\ni(t) - \left[a_n{}^\ni(t)\frac{d^n x}{dt^n} + \dots + a_m{}^\ni(t)\frac{d^m x}{dt^m} \right] \qquad (3.2)$$

Then, all deviations of the parameters placed on the right from the
values assumed for the model will be taken into account by
adjustments on the $a_{m-1},\dots,a_0$, in the left-hand side. Having
measured the values of the $x_i, \dot{x}_i, x_i{}^{(n)}$ at times $t_1, t_2, \dots, t_s$
on an interval $[t_1, t_s]$, taken such that the coefficients a_i to
sufficient precision can be assumed constant over the interval,
Card 3/4

On one type ...

S/024/62/000/001/009/013
E140/E435

a set of s equations is obtained for determining $n + 1$ unknowns.
The interval must be selected not only on the basis of the above
consideration but also taking into account the rate of change of the
perturbations and the time for measuring and calculation, etc.
The authors adopt the criterion of least squares in calculating
the a_i.   To obtain a unique solution of the system of equations
the vectors $x^{(n)}$ must be linearly independent.   Where this is
not the case, the coefficients a_n, a_{n-1}, ..., a_{n-L+1} are assumed
equal to their model values, and the remaining L coefficients
calculated.   Where $L = 0$ all coefficients are equal to their
model values and no adjustment is made on the system.   In
conclusion, some practical questions of calculation are discussed.
Conditions for a least squares criterion minimizing a certain
function are found, also an integral form of the equations defining
the coefficients of the approximating equations.   The authors
consider that using their method it will frequently suffice to
measure the regulated quantities and their first two derivatives.

SUBMITTED: September 8, 1961

Card 4/4

CHERNETSKIY, V.I. (Leningrad)

Technical and economic approach to the choice of the
principal parameters of new automatic control means. Izv.
AN SSSR. Tekh. kib. no.4:44-55 Jl-Ag '63.   (MIRA 16:11)

KOCHETKOV, Viktor Terent'yevich; POLOVKO, Anatoliy Mikhaylovich;
        FONOMAREV, Valentin Mikhaylovich. Prinimali uchastiye:
        MAKAR'YEV, B.M.; CHERNETSKIY, V.I.; PEROVSKIY, B.N.,
        retsenzent; PETROV, F.S., red.

    [Theory of remote control and homing guidance of rockets]
    Teoriia sistem teleupravleniia i samonavedeniia raket. Mo-
    skva, Izd-vo "Nauka," 1964.   536 p.   (MIRA 17:6)

ACCESSION NR: AP4028930   S/0280/64/000/002/0093/0101

AUTHOR: Kuznetsov, Yu. K. (Leningrad); Sen'chenko, R. P. (Leningrad);
Chernetskiy, V. I. (Leningrad)

TITLE: Algorithm of the problem of determining optimum control-system
parameters by the gradient method

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 2, 1964, 93-101

TOPIC TAGS: automatic control, nonlinear automatic control, gradient numerical
method, automatic control algorithm, numerical method

ABSTRACT: The problem considered is that, with a specified control-system struc-
ture and specified differential equations describing the motions of the controlled
plant, such k_1, k_2,... k_n, parameters of the controller be determined which would
ensure a minimum mean-square error. As a rule, the controller-plant system
nonlinear. A numerical "gradient" method is suggested as having the advantage
of simplicity over variational methods in solving this problem. Recommendations

Card 1/2

ACCESSION NR: AP4028980

are given on evaluating the step and selecting the method of integrating the
initial set of equations; various methods of evaluating and averaging the basic
functional (the control-quality criterion) are examined. The finding of param-
eters which correspond to the functional extremum is performed by the gradient
method. A detailed logical scheme for compiling the numerical-problem algorithm
is presented. Orig. art. has: 1 figure and 35 formulas.

ASSOCIATION: none

SUBMITTED: 15Dec62   DATE ACQ: 30Apr64   ENCL: 00

SUB CODE: IE   NO REF SOV: 005   OTHER: 002

Card 2/2

CHERNETSKIY, V.K.

Clinicomorphological characteristics of tumors with bilateral lesions of the optic thalamus. Vop.neirokhir. 28 no.4:15-19 Jl-Ag '64.

(MIRA 18:3)

1. Otdel nevrologii (zav. - prof. I.B.Litvak) i laboratoriya patomorfologii (zav. - prof. Kh.N.Zil'bershteyn) Ukrainskogo nauchno-issledovatel'skogo psikhonevrologicheskogo instituta, Khar'kov.

CHERNETSKIY, V.K.

Clinicomorphological characteristics of tumors of the
ventrolateral regions of the optic thalamus. Zhur. nevr.
i psikh. 64 no.8:1126-1131 '64.   (MIRA 17:12)

1. Otdel nevrologii (zaveduyushchiy - prof. L.B. Litvak) i
laboratoriya patomorfologii (zaveduyushchiy - prof. Kh.N.
Zil'bershteyn) Ukrainskogo nauchno-issledovatel'skogo
psikhonevrologicheskogo instituta (direktor O.R. Stepanenko),
Khar'kov.

NIKITIN, I.P., inzh.; DREBNITSA, A.V., inzh.; CHERNETSOV, V.M.;
    KUPRIK, N.F., gornyy tekhnik

Industrial testing of drill bits with an 85 mm diameter for
rotary drilling in underground conditions. Vzryv. delo no.51/8:
293-295 '63.   (MIRA 16:6)

1. Krivorozhskiy filial Institut gornogo dela AN UkrSSR (for
Nikitin, Drebnitsa). 2. Rudoupravleniye imeni K. Libknekhta
(for Chernetso, Kuprik).
              (Boring machinery—Testing)

GAGAUZ, P.G., inzh.; NIKITIN, I.P., inzh.; FEDORENKO, P.I., inzh.; CHERNETSOV, V.M.; KUPRIK, N.F., tekhnik

Practice of carrying out blasting operations in drifting at the K. Libknekht Mine. Vzryv. delo no.51/8:295-299 '63.
(MIRA 16:6)

1. Krovorozhskiy filial Instituta gornogo dela AN UkrSSR (for Gagauz, Nikitin, Fedorenko). 2. Rudoupravleniye imeni K. Libknekhta (for Chernetsov, Kuprik).
(Krivoy Rog Basin—Blasting)

AUTHORS: Soborovskiy, L. Z.,   Gladshteyn, B. M.,   Kiseleva, M. I.,
             Chernetskiy, V. N.

SOV/79-28-7-30/64

TITLE: Investigation in the Series of Organosulfur Compounds
             (Issledovaniye v ryadu organicheskikh soyedineniy sery)
             I. The Synthesis of the Fluoranhydrides of Alkanesulfo Acids
             and Their Halogen Derivatives (I.Sintez ftorangidridov al-
             kansul'fokislot i ikh galoidoproizvodnykh)

ABSTRACT: The fluoranhydrides of aliphatic sulfo acids are little in-
             vestigated. Some of them are of practical value, as, for
             instance, methane sulfofluoride which is an effective in-
             secticide. In the present paper the authors realized the
             synthesis of some alkane sulfofluorides and their halogen
             derivatives (comprising some not yet described in publica-
             tions); they do so according to the general scheme
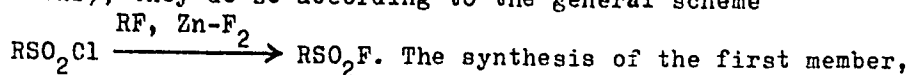
$$RSO_2Cl \xrightarrow{\text{RF, Zn-F}_2} RSO_2F.$$ The synthesis of the first member,

Card 1/3

Investigation in the Series of Organosulfur Compounds. I. The Synthesis of
the Fluoranhydrides of Alkanesulfo Acids and Their Halogen Derivatives

SOV/79-28-7-30/64

of methane sulfofluoride, according to the method by Davis,
Dick (Devis, Dik) cannot be carried out. The authors suc-
ceeded in obtaining in good yield methane sulfofluoride
from methane sulfochloride by the action of potassium fluoride
on it; the fluoride could be distilled off by means of steam
without any admixtures. The same way the authors synthesized
the hitherto unknown n.- and isopropane sulfofluorides, as
well as the iodomethane sulfofluoride which could not be ob-
tained according to the method by Davis. Thus the authors·
synthesized the hitherto unknown fluoranhydrides n-propane-,
isopropane-, iodomethane, β-fluorethane-, β-chlorethane-,
β-bromethane-, β-nitroethane- and β,β-dichlorethane sulfo
acids. It was shown that the heating of the methane-, n.-pro-
pane-, isopropane- and iodomethane sulfochlorides with a
saturated solution of potassium fluoride and with uninter-
rupted distillation of the forming sulfofluoride by means
of steam represents a convenient preparative method for the
synthesis of the above mentioned compounds. There are 14
references, 6 of which are Soviet.

Card 2/3

507/79-28-7-5-64

Investigation in the Series of Organosulfur Compounds. I. The Synthesis of the Fluoranhydrides of Alkanesulfo Acids and Their Halogen Derivatives

SUBMITTED: May 51, 1957

1. Sulfur compounds (Organic)--Analysis   2. Fluoroanhydrides--Synthesis
3. Acids--Synthesis   4. Halogen compounds--Chemical properties

Card 3/3

SOV/79-28-7-31/64

AUTHORS: Soborovskiy, L. Z., Gladshteyn, B. M., Chernetskiy, V. N.,
            Kiseleva, M. I.

TITLE: Investigation in the Series of Organic Sulfur Compounds
            (Issledovaniya v ryadu organicheskikh soyedineniy sery)
            II. The Synthesis of the Fluoranhydrides of Alkenesulfo Acids
            and Their Halogen Derivatives (II. Sintez ftorangidridov
            alkensul'fokislot i ikh galoidoproizvodnykh)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 7, pr. 1870-1873
            (USSR)

ABSTRACT: Continuing the previous paper (Ref 1) on the effect of po-
            tassium fluoride on some alkane sulfochlorides under the
            convenient preparative production of alkane- and halogen-
            alkane sulfofluorides the authors carried out the investi-
            gation of the reaction of potassium fluoride with halogen
            substituted ethanesulfochlorides; it was found that besides
            the substitution of the chlorine anhydride by fluorine an-
            other dehydration and dehalogenation takes place with un-
            saturated sulfo chlorides being obtained as final products

Card 1/3

Investigations in the Series of Organic Sulfur Compounds. II. The Synthesis
of the Fluoranhydrides of Alkenesulfo Acids and Their Halogen Derivatives

(see scheme 1). The property of potassium fluoride to cleave
off the hydrogen halide from two adjacent carbon atoms made
it possible to realize the direct transition from the halogen
derivatives of alkane sulfochloride to the sulfo fluorides
of the unsaturated series in one stage in good yields. Hither-
to only one such representative has been known, the vinyl
sulfofluoride (Ref 3). This reaction was used for the synthesis
of the fluoranhydrides of the unsaturated aliphatic sulfo
acids and their halogen derivatives, the constants of which
are given in table 1. The halogenalkane sulfochlorides (as
given in scheme 2) served as initial products for the syn-
thesis of the sulfofluorides of the unsaturated type and
their halogen derivatives, although the yield of the obtained
β-chlorethane sulfochloride was small. Concluding it may
be said that the vinyl sulfofluoride and the β-chlorovinyl
sulfofluoride (in two stereoisomeric forms) were synthesized
in the way described. There are 11 references, 4 of which
Card 2/3   are Soviet.

SOV/79-28-7-31/64

Investigations in the Series of Organic Sulfur Compounds. II. The Synthesis
of the Fluoranhydrides of Alkenesulfo Acids and Their Halogen Derivatives

SUBMITTED: May 31, 1957

1. Sulfur compounds (organic)--Analysis   2. Fluoroanhydrides
--Synthesis   3. Acids--Synthesis   4. Halogen compounds--Chemical
properties   5. Potassium fluoride--Chemical effects

Card 3/3

GLADSHTEYN, B.M.;CHERNETSKIY, V.N.;KISELEVA, M.I.;SOBOROVSKIY, L.Z.

Sulfur organic compounds. Part 3: Properties of haloalkene, alkene
and haloalkenesulfofluorides. Zhur. ob. khim. 28 no. 8:2107-2111
Ag '58.   (MIRA 11:10)
            (Sulfur organic compounds)

CHERNETSKIY, V.P.

KIPRIANOV, A.I.; SEREBRYANIY, S.B.; CHERNETSKY, V.P.

Structure of iodinine. C.R. Acad. Sci., U.R.S.S., '49, 69, 651-653.
(BA - A II Ja '53:115)   (MLRA 2:11)
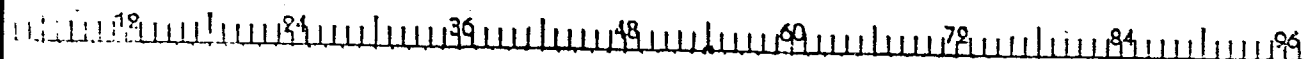
CHERNETSKIY, V. P.   10

Synthesis of derivatives of 1-hydroxyphenazines. II 1,6- and 1,8-diahxoxyphenazines. S. B. Serebryanyi and V. P. Chernetskii. Zhur. Obshchei Khim. (J. Gen. Chem.) 21, 2183-9(1951); cf. C.A. 45, 3000e.—o-Nitroanisole (30 g.) let stand 3 days with 30 g. m-anisidine and 130 g. powd. KOH, steam-distd., the distn. residue extd. with 15% hot HCl, the ext. partially neutralized with NaOH, the ppt. filtered, the filtrate neutralized with NH₄OH, and the ppt. extd. in a Soxhlet app. with ligroine gave the more sol. 1,6-dimethoxyphenazine (I) (total 1.2 g.), m. 175°, and the less sol. 1,8-isomer (II), m. 252-3° (crude), m. 259-60° (pure; from ligroine or Ac₂O); picrates m. 258° and m. 259-60°, resp. Nitration of m-nitroanisole and reduction of the dinitro deriv. with SnCl₂-HCl gave 60% 3-methoxy-o-phenylenediamine; HCl salt, m. 245-7° (decompn.). This (1.75 g.) in 20 ml. H₂O neutralized carefully with Na₂CO₃, extd. with C₆H₆, the ext. coned., treated with 20 ml. AcOH, added to 2.5 g. 2,3-(HO)₂C₆H₃OMe that had been shaken 10 min. with 50 g. Pb peroxide in C₆H₆, filtered, the mixture washed with aq. NaOH after 2 hrs. at room temp., extd. with dil. HCl, and the ext. treated with NH₄OH yielded mixed II and 1,5-dimethoxyphenazines (III) (1 g.) sepd. via the picrate (II forms a poorly sol. picrate in EtOH), thus affording pure II, identical with the above specimen, and III, m. 240-50° (from EtOH). Similarly 20.0 g. o-O₂NC₆H₄OEt and m-phenetidine with powd. KOH gave 1.5 g. 1,6-di-ethoxyphenazine, m. 153° (from ligroine or Ac₂O), and 3.2 g. 1,8-isomer, m. 174° (from ligroine); picrates, m. 225-6° decomp. 253-4°, resp. III does not form a picrate in EtOH.

G. M. Kosolapoff

1. CHERNETSKIY, V. P., KIPRYANOV, A. I.

2. USSR(600)

4. Phenazines

7. Synthesis of N-oxides of phenazine derivatives. Part 1. Mono-N-oxides of alkoxyphenazines. Zhur. ob. khim., 22, No.10, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

/ Synthesis of halogen derivatives of phenazine. I. Mono and dichlorophenazines. V. P. Chernetskii and S. B. Serebryanyi (Inst. Org. Chem., Acad. Sci. Ukr. S.S.R.). Sbornik Statei Obshchei Khim., Akad. Nauk S.S.S.R. 1, 646-9(1953).—Heating 15.75 g. o-ClC$_6$H$_4$NO$_2$, 9.3 g. PhNH$_2$, 25 g. powd. KOH, and 150 ml. MePh with azeotropic removal of H$_2$O 8-10 hrs. gave 12.4% 1-chlorophenazine, m 121-3° (from EtOH). Similarly 15.75 g. p-ClC$_6$H$_4$NO$_2$ and 9.3 g. PhNH$_2$ with 25 g. powd. KOH in MePh gave 12% yellow 2-chlorophenazine N-oxide, m. 178-9° decomp. 217-19° (from EtOH); this (1 g.) in 50 ml. concd. HCl was treated with SnCl$_2$ in HCl, heated 10-15 min. to 70-80°, dild. with H$_2$O, the ppt. treated suspended in H$_2$O, alkalized, treated with a little K$_3$Fe(CN)$_6$ and stirred 1 hr. yielding 92.5% 2-chlorophenazine, yellow, m. 140° (cf. McCombie, et al., C.A. 22, 1977). Similarly 15.75 g. o-ClC$_6$H$_4$NO$_2$ and 12.8 g. o-ClC$_6$H$_4$NH$_2$ gave 12% 1,6-di-chlorophenazine, yellow, m. 271-2° (from CHCl$_3$) and 31% 2-chloro-2'-nitrodiphenylamine, red, m. 115-16°. Similar reaction with m-ClC$_6$H$_4$NH$_2$ gave 2 phenazines, from which was isolated 10.4% 1,6-dichlorophenazine, yellow, m. 171-4°; the use of p-ClC$_6$H$_4$NH$_2$ gave 10.5% 1,7-dichlorophenazine, m. 222-3°, along with 8.1% 4'-chloro-2-nitrodiphenylamine, red, m. 145-6°. In the course of prepn. and isolation of the 1,6-dichlorophenazine, above, there was also obtained 16.4% 1,8-dichlorophenazine, yellow, m. 211-12°, sepd. by chromatography on Al$_2$O$_3$; this was converted to the corresponding dihydroxyphenazine, whose di-Ac deriv., m. 255-6° (cf. C.A. 47, 5403).)

G. M. Koselapoff

... ... derivatives of phe...
... ... nitrochloranilin X ...
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... ... 1960 ... Fachter and K...
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CHERNETSKIY, V. P.

CHERNETSKIY, V. P.- "Synthesis and Investigation of Haloid Derivatives of Phenazin."
Acad Sci Ukraine SSR, Inst of Organic Chemistry, Kiev, 1955 (Dissertations for Degree
of Candidate of Chemical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

USSR/ Chemistry – Organic chemistry

Card 1/1   Pub. 116-16/30

Authors   : Chernetskiy, V. P., and Kiprianov, A. I.

Title   : Chlorination of phenazine

Periodical : Ukr. khim. zhur. 21/3, 367-369, June 1955

Abstract   : It is proven experimentally that the chlorination of phenazine with gaseous
              Cl in carbon tetrachloride leads to the formation of 1-chlorophenazine and
              1,4-dichlorophenazine. Chlorination of the phenazine under identical condi-
              tions but in the presence of anhydrous sodium acetate was found to be a more
              suitable method for the above ment. of chloro and dichlorophenazines.
              Five references: 2 USSR, 2 German and 1 Italian (1875-1954).

Institution : Acad. of Sc., Ukr. SSR, Inst. of Organ. Chem.

Submitted   : December 24, 1954

Synthesis of some fluoro derivatives of phenazine, azo-
benzene and diphenylamine. V. P. Chernetskii, L. M.
Yagupol'skii, and S. B. Serebryanyi. Zhur. Obshchei
Khim. 25, 2161-70(1955)—Refluxing 24.6 g. PbNO₃, 17.1
g. m-FC₆H₄NH₂, 35 g. KOH and 150 ml. C₆H₆ 1 hr. gave,
after steam distn. and extn. with 2.5 HCl, 2% 1-fluoro-
phenazine, m. 208-9°. and 0.2% 2-fluorophenazine, m. 181°.
2°.   Reaction of 14.1 g. m-O₂NC₆H₄F, 8 g. PhNH₂, and
23 g. KOH in C₆H₆ in 1 hr. gave 2% 1-fluorophenazine 10-
oxide, decomp. 225-5° in AM 4 reduction of this gave
1-fluorophenazine. Reaction of 14.1 g. PbNO₃, 11.1 g.
p-FC₆H₄NH₂, and 36 g. KOH in reflux C₆H₆ gave 35-40% 2-
phenazine; in refluxing MeP, there is formed 35-40% 2-
hydroxyphenazine 10-oxide, decomp. 254-6°. The di-
azonium fluoborate from 2-aminophenazine on thermal de-
compn. gave 1-10% 2-fluorophenazine, however a 41%
yield was obtained when 1.4 g. 2-nitro-4'-fluorodiphenyl-
amine and 0.8 g. activated C were heated 5 min. at 250-
300°, extd. with C₆H₆, and chromatographed on Al₂O₃.
Treatment of 2 g. 2,3-(H₂N)₂C₆H₃CF₃ in Et₂O with o-benzo-
quinone in the presence of Na₂SO₄ gave in 2 days 4.5%
1-trifluoromethylphenazine, m. 125-6°. Similarly was prepd.
10.7% 2-trifluoromethylphenazine, m. 177.8°, it also being
formed in 47% yield on heating 2-nitro-3'-trifluoromethyl-
diphenylamine with C to 250-260°. Reaction of 16.3 g.
o-O₂NC₆H₄OMe with 11.1 g. p-FC₆H₄NH₂ and 20 g. KOH
in C₆H₆ 2 hrs. gave 2% 1-methoxy-7-fluorophenazine, m. 148.

V. G. Chernetskii

50° and a trace of 1,7-dimethoxyphenazine. Fraction of 9.6 g. m-$O_2NC_6H_4F$ with ... $PhNH_2$ and 10 g. KOH in C_6H_6 in 20 hr. gave ... ... $PhNO_2$ ... in 153°, ... $CF_3C_6H_4NH_2$ ... ... *methylphenazine* ... ... tion of $PhNO_2$ with ... $PhNH_2$ and KOH gave ... phenazine and 2-trifluoro... ... ... following products were ... ... C_6H_6 ... the indicated ...

3-fluoroazobenzene m. ... ... NH_2 gave 23.2%, *2-nitro-...*
m. 33-4°; *m*-FC_6H_4... ... ... and 5.4%, *4-nitro-3-fluoro...*
fluorodiphenylamine, m. 125° ... ... and *p*-$FC_6H_4NH_2$ gave
5.2%, *2-nitro-4-fluoro...* ... ... 2.1%, as well as
nitro-4'-fluorodiphenylamine m. 161°, ... *m*-$O_2NC_6H_4Me$
a trace of 4-fluoro... ... ... *3-methoxy-4-nitro-4'-fluoro*
and *p*-$FC_6H_4NH_2$ gave ... *3-nitro-4-fluorodiphenyl*
phenylamine, m. 141-2°. 6.3% *2-nitro-4-fluorodiphenyl*
amine, m. 75-6°, and a little *2,2'-dimethoxyazoxybenzene*, m.
87-8°, as well as *2-methoxy-4'-fluoroazobenzene*. m. 68-76°,
in 7.5% yield. $PhNO_2$ and m-$F_3CC_6H_4NH_2$ gave 35%, *2-*
nitro-3'-trifluoromethyldiphenylamine, m. 60-2°, 3% *4-*
nitro-3'-trifluoromethyldiphenylamine, m. 145°, 5.3% *4-*
trifluoromethylazobenzene, m. ... and 2.3% *azoxybenzene*,
m. 52-6°.

G. M. Kosolapoff

iodophenazine were best isolated from the mixt. in the
form of sparingly sol. HCl salts. Heating 3.5 g. 3-iodo-r-

CHERNETSKIY, V.P.

Halogen substitution in haloidphenazine by methoxy-, oxy-, amino- and mercapto - groups. Zhur.ob.khim. 27 no.10:2833-2837 O '57.

(MIRA 11:4)

1.Institut organicheskoy khimii Akademii nauk USSR.
(Phenazine) (Substitution (Chemistry))

NEKRYACH, Ye.F. [Nekriach, IE.F.]; NAZARENKO, Yu.P.; CHERNETSKIY, V.P. [Chernets'kyi, V.P.]; [Babko, A.K.], akademik, otv.red.; ROZUM, Yu.S., kand.khim.nauk, red.; FIALKOV, Ya.A. [deceased], red.; FOMENKO, G.S. [Fomenko, H.S.], kand.khim.nauk, red.; SHEKA, I.A., prof., doktor khim.nauk, red.; GNATYUK, G.M. [Hnatiuk, H.M.], red.-leksikograf; POKROVSKAYA, Z.S. [Pokrovs'ka, Z.S.], red.izd-va; YEFIMOVA, M.I. [IEfimova, M.I.], tekhn.red.

[Russian-Ukrainian chemical dictionary; 6000 words] Rossis'ko-ukrains'kyi khimichnyi slovnyk; 6000 terminiv. Kyiv, Vyd-vo Akad.nauk URSR, 1959. 204 p.
(MIRA 15:5)

1. AN USSR (for Babko). 2. Chlen-korrespondent AN USSR (for Fialkov).

(Chemistry—Dictionaries)
(Russian language—Dictionaries—Ukrainian)

BALITSKIY, K.P., kand.med.nauk; VORONTSOVA, A.L.; PRIDATKO, O.Ye.; SEREBRYANYY, S.B., doktor khim.nauk; CHERNETSKIY, V.P., kand.khim.nauk; YURGAKOVA, L.G.

Anticancerous action of the preparation neocide and some of its fractions. Vrach.delo no.9:927-930 S '59.

(MIRA 13:2)

1. Laboratoriya kompensatornykh i zashchitnykh funktsiy (rukovoditel' - akad. AN USSR R.Ye. Kavetskiy) Instituta fiziologii imeni A.A. Bogo-mol'tsa AN USSR i laboratoriya organicheskogo sinteza (rukovoditel' - akademik AN USSR A.I. Kipriyanov) Instituta organicheskoy khimii AN USSR.

(ETHANE)   (CANCER)

CHERNETSKIY, V.P.

Reduction of N-oxides of phenazine and its derivatives. Ukr. khim.zhur. 26 no.1:86-87 '60.

(MIRA 13:5)

1. Institut organicheskoy khimii AN USSR.
        (Phenazine)

CHERNETSKIY, V.P.

N-Alkylphenazinones. Part 6: N-Ethylalophenazinones. Ukr. khim. zhur. 26 no.4:505-509 '60.

(MIRA 13:9)

1. Institut organicheskoy khimii Akademii nauk USSR.
(Phenazinone)

CHERNETSKIY V. P.

27.2400

28697
S/021/60/000/012/005/006
D251/D302

AUTHORS: Horodets'kyy, O.A., Corresponding Member
            AS UkrSSR, Baraboy, V.A., and Chernets'kyy, V.P.

TITLE: The therapeutic action of gallic acid derivatives
            in acute radiation sickness

TEXT: The authors state the two effects of radiation on pro-
teins und nucleic acids: The indirect effect is the changes in
structure and function caused by free-radical reactions follow-
ing the radiolysis of water, and the direct action is the exci-
tation of the molecules by radiation into a metastable state.
The inhibition of these reactions may, therefore, have great
significance in preventing and treating radiation sickness.
The authors used propyl gallate and sodium gallate as inhibi-
tors. An experiment was carried out on 360 white mice of weight
Card 1/2

28697

The therapeutic action ...   S/021/60/000/012/005/006
                                    D251/D302

19-23 gr, subjected to a minimum lethal dose of radiation (600r), and various tests were carried out to determine the effectiveness of the gallates in preventing and curing radiation sickness. It was found that they are effective as a means of preventing radiation sickness, and also of curing it, provided that they are given in large doses immediately after irradiation. In the case of a dose of 300 mg per 1 kg of sodium gallate, the survival rate is claimed to be almost 50%. If gallates are applied at longer intervals (1 hour) after irradiation, the effect is considerably less. ⟨Abstractor's note: It is difficult to understand how the gallates are applied, since it says merely e.g. "gallate of estimated 100 mg per 1 kg weight"⟩ There are 2 tables and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Instytut fiziolohiyi im. A.A. Bohomol'tsa;
              (Institute of Physiology im. A.A. Bohomolets);
              Instytut orhanichnoyi khimiyi AN URSR (Institute
              of Organic Chemistry AS UkrSSR)

SUBMITTED: July 15, 1960
Card 2/2

27.2400

30369

S/205/61/001/005/005/005
D299/D304

AUTHORS: A.A. Gorodetskiy, V.A. Baraboy, and V.P. Chernetskiy

TITLE: The protective action of certain inhibitors of chain oxidation processes with acute radiation sickness

PERIODICAL: Radiobiologiya, v. 1, no. 4, 1961, 781 - 788

TEXT: One of the most promising ways of counteracting radiation afflictions is to break the chain reaction in one of its initial links. If modern conceptions of the mechanism of protective action are true, compounds capable of fixing active radicals and of lowering the tissues' redox potential will prove to be effective agents in the prophylaxis and treatment of radiation sickness. This applies especially to the group of inhibitors of chain oxidation processes, but the authors could find no published data on the advisability of using these preparations in cases of radiation sickness. Experiments were conducted with white mice and white rats injected intraabdominally with propyl gallate (a 0.75% solution in a phosphate buffer) 30 min before irradiation. Ir-

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✗

The protective action of ...

30369
S/205/61/001/005/005/005
D299/D304

radiation was effected with an $P\mathcal{Y}M$-3 (RUM-3) and an $P\mathcal{Y}M$-11 (RUM-11) apparatus at intensities of 24.5 and 25.4 r/min. The mice were given a dose of 600 r and the rats a dose of 750 r. In its most effective dose of 60 mg/kg of body weight, propyl gallate increased the survival rate of the irradiated animals and extended the average life span of the irradia-ted mice to 19.6 days (8.8 days in the control series). The injection of propyl gallate also postponed the period of the height of clinical sym-ptoms of acute radiation sickness from 6 - 10th day to 9 - 15th day after irradiation. A polarographic study was made of the action of propyl gal-late on the activity of the blood serum proteins, especially the activity of the SH-groups. The inhibitor effect of propyl gallate was expressed in a sharp drop in the activity of the serum proteins' SH-groups which gave them a certain measure of protection against the destructive action of radiation. This also accounted for the more rapid restoration of this activity only 1 - 2 days after irradiation. The author then describes tests conducted with other inhibitors such as: gallic acid, methyl gallate, butyl gallate and sodium gallate. The comparative efficacy of these pre-parations can be seen from the following table:

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30369

The protective action of ...。

S/205/61/00:/005/005/005
D299/D304

Preparation	No. of mice	No. of survivors	% of survivors	Mean life span (days)
Gallic acid	30	9	30.0	16.5
Methyl gallate	30	7	23.3	15.1
Propyl gallate	260	112	43.1	19.6
Butyl gallate	30	15	50.0	21.0
Sodium gallate	30	14	47.0	25.0
Control	100	2	2.0	8.8

The table shows that sodium gallate, propyl gallate and butyl gallate

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The protective action of ...   S/205/61/001/005/005/005
                                  D299/D304

are most promising anti-radiation preparations. There are 5 figures,
1 table and 24 references: 9 Soviet-bloc and 15 non-Soviet-bloc. The
4 most recent references to the English-language publications read
as follows: A.M. Siddiqi,A.L. Tappel, Arch. Biochem. and Biophys., 60,
91, 1956; A.L. Tappel, Food Res., 18, 560, 1953; Th.H. Pritchard, Inds
Parfum., 9, 2, 51, 1954; D.B. Johnston, M.W. Foote, W.I. Rogers,J.E.
Little, Antibiot. and Chemotherapy, 3, 183, 1953

ASSOCIATION: Institut fiziologii aim. A.A. Bogomol'tsa (Institute
                of Physiology im. A.A. Bogomolets), Kiyev

SUBMITTED: January 7, 1961

Card 4/4

CHERNETSKIY, V.P.

27.2400

S/021/61/000/006/009/009.,
D247/D301

AUTHORS: Gorodets'kyy, O.A., Corresponding Member AS UkrSSR,
Baraboyi, V.R., and Chernets'kyy, V.P.

TITLE: Protective effect of some inhibitors of chain oxi-
dation processes in acute radiation illness

TEXT: This experimental investigation was based on the assumption
that the destructive processes in living tissues caused by penetra-
ting radiation are similar to those caused by cancer. The authors
injected propyl gallate] into the peritoneum of albino mice as a
75 % solution in a phosphate buffer [Abstractor's note: Quantities
not given]. The irradiation was carried out with the RVM apparatus
as follows: 180 kW, 10 mA, distance 40 cm, with 0.5 cu and 1,0Al
filters, dose intensity 24.5 r/sec, the smallest lethal dose 600 r.
920 mice and 145 rats were tested: The mortality of control ani-

Card 1/4

25168

Protective effect of some ...   S/021/61/000/006/009/009
                                       D247/D301

mals (not subjected to propyl gallate injections) equalled 98 %
of mice and 100 % of rats. Propyl gallate was injected 30 minutes
before irradiation. After 30 days, in cases where optimal doses of
-this compound were used [Abstractor's note: Amounts not given],
43 % of irradiated animals were alive, their amount in different
experiments varying from 32 to 50 %: in these series 260 mice were
injected and 100 served as control ones. The projective effect of
propyl gallate treatment was shown by the average mouse life-span
of 8.8 days for control animals and 20 days for the injected ones,
symptoms of acute radiation illness appearing after 6-10 days in
the first group and after 9-15 days in the second group. The morta-
lity during the first 10-15 days in both groups was the result of
acute radiation illness; later - after 16-30 days - death of the
injected animals was due mostly to secondary injections: hystere-
lisis, pneumonia and intestinal worms, invasion; sometimes these
infections were found in animals which survived. In the authors'
opinion, a combined therapy with antibiotics could save a greater
number of animals. As stated previously, the general amount of nu-

Card 2/4

25168

Protective effect of some ...   S/021/61/000/006/009/009.,
                                     D247/D301

cleic acids in liver, spleen, mucous intestine membranes and espe-
cially in testicles of treated animals was diminished mostly in
rapport to RNC (observed on the 3rd day). During the study of sul-
fohydride and bisulfide activity in the protein groups of blood
serum by polarographic analysis, its marked decrease was observed
immediately after irradiation, and it was more pronounced in pro-
tected animals than in control animals. After 24 hours, however,
this activity began to recover. The recovery of the protected ani-
mals was much greater than that of the control ones, full recovery
being observed in the surviving animals after 16-30 days. Propyl
gallate probably protects the active groups of blood serum and
speeds their recovery. By comparing the protective effects of pro-
pyl gallate and cysteine it was found that they act similarly: 45%
of animals survived when these compounds were injected separately
into different animals or together into the same ones. The inhibi-
ting effect of gallates depends on the presence of 3 hydroxyls in
their rings and their biological effect depends also on their so-
lubility in the body liquids, their velocity of diffusion through

Card 3/4

Protective effect of some ...   S/021/61/000/006/009/009
                                             D247/D301

cell membranes etc., all these properties depending on chemical
groups attached to the carboxyl group. The author investigated pro-
hibitive properties of gallic acid and of some of its derivatives:
the results are tabulated. They found that esters with longest al-
cohol chains are the most effective ones. Sodium gallate, on acc-
ount of its high solubility is very effective for it may be quick-
ly absorbed in the bodies of even large animals. In view of the
obtained results gallic acid and its derivatives may be regarded
as a new group of protective anti-radiation compounds and worthy
of further study. There are 1 table and 8 Soviet-bloc references.

ASSOCIATION: Institut fiziologiy im. O.O. Bogomoltsya, institut
             organichnoyi khimiyi AN URSR (Institute of Physiology
             im. O.O. Bogomolets, Institute of Organic Chemistry
             AS UkrSSR)

SUBMITTED: July 15, 1960

Card 4/4

GORODETSKIY, A.A.; BARABOY, V.A.; CHERNETSKIY, V.P.

Protective effect of some inhibitors of chain oxidation processes during acute radiation sickness. Radiobiologiia 1 no.5:781-788 '61.
(MIRA 14:11)

1. Institut fiziologii imeni A.A.Bogomol'tsa, Kiyev.
(RADIATION PROTECTION)   (GALLIC ACID)

SHORM, F. [SORN, F.], akademik; CHERNETSKIY, V.P.; KHLADEK, S. [HLADEK, S.];
VESELAY, Y.; SMRT, Y.

6-Azacytidine and its derivatives. Dokl.AN SSSR 137 no.6:1393-
1395 Ap '61.

(MIRA 14:4)

1. Institut organicheskoy khimii i biokhimii AN Chekhoslovatskoy SSR,
Praga (for all except Chernetskiy). 2. Institut organicheskoy khimii
Akademii nauk USSR, Kiyev (for Chernetskiy).

(Azacytidine)

ROZUM, Yu.S.;SEREBRYANYY, S.B.; KARABAN, Ye.F.; CHERNETSKIY, V.P.; DRONKINA, M.I.

Influence of the polar substituents on the reduction potentials of mono- and disubstituted derivatives of phenazine and its N-oxides.

Zhur. ob. khim. 34 no.8:2599-2603 Ag '64.   (MIRA 17:9)

1. Institut organicheskoy khimii AN UkrSSR.

L 43887-65 EWA(b)-2/EWA(j)/EWP(j)

ACCESSION NR: AP5010906

AUTHORS: Kal'nov, L. A.; Chernetskiy

TITLE: Aerosol apparatus for aerogen
169759

SOURCE: Byulleten' izobreteniy i tov.

TOPIC TAGS: immunization, aerosol, l

ABSTRACT: This Author Certificate pr
immunization of livestock. The appar
sor with atomizing nozzle (see Fig.
cy of livestock immunization and for
preparations, the aerosol chamber form
with apparatus for a simultaneous airt
the heads of the livestock. The upper
curtains with chains for grasping the h
figure.

Card 1/2

L 43887-65
ACCESSION NR: AP5 506

ASSOCIATION: petsial'noye konstrukto
priborostroyeniya MSKh SSSR (Special C
Equipment Construction, MSKh SSSR)

waterhame
of the

SUBMITTED: 03sep63

NO REP SOV: 000

OTHER

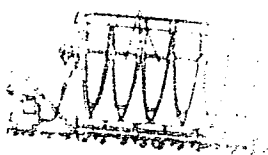Card 2/3

L 43897-55
ACCESSION NR: AP5010906

Fig. 1. 1- comp-
2- chains; 3- cur-

Card 3/3

SOV/128-59-11-19/24

18 (5)

AUTHORS: Gorfinkel', V.M. and Chernetsov, A.V., Engineers

TITLE: Increasing Cupola Blast Pressure

PERIODICAL: Liteynoye proizvodstvo, 1959, Nr 11, pp 42-43 (USSR)

ABSTRACT: The quantity and buoyancy of blast are the chief fac-
tors conditioning the efficiency of a cupola and the
quality of its production. However, the values of blast
buoyancy vary, for cupolas with a diameter from 75 to
80 cm, from 400 mm to 650 mm of water column. At the
Sverdlovsk Turbomotor Plant, a cupola, 80 cm in diame-
ter, had a pressure of 400 mm at the tuyeres. Later on,
the cupola was reconstructed and the pressure raised
to 650 mm. As a result, the blast was increased by
20% and the cupola output raised from 3.2 tons to 3.7
tons an hour. The cupolas are equipped with forehearths
into which oxygen, under pressure of 5-10 atm, is pe-
riodically supplied. The temperature of cast iron was
raised from 1330°-1370°C to 1360°-1390°C. As a result,
the flaw on gas blisters was reduced from 3.3% to 2%

Card 1/2

SOV/128-59-11-19/24

Increasing Cupola Blast Pressure

and the defects of joints - from 0.44% to 0.3%.
There are 2 diagrams and 3 Soviet references.

Card 2/2

ISAKOV, V.A.; KHARTOVICH, Yu.I.; CHERNETSOV, G.Ye.

Ways of improving the drawing and the haulage of ores in the
"Sokol'noye" deposit mines. Trudy Inst. gor. dela AN Kazakh.
SSR 19:45-55 '65.
(MIRA 18:12)

ACC NR: AP6015713   (A,N)   SOURCE CODE: UR/4013/66/000/009/0126/0126

INVENTOR: Vasil'yev, D. P.; Vitozhents, E. V.; Chernetsov, I. B.; Berlin, Y. B.; Mosenkov, V. N.

ORG: None

TITLE: Direct rpm controller for low-power gas turbine engines. Class 46, No. 181448 [announced by the Central Scientific Research and Design Institute of Vehicle and Stationary Engine Fuel Equipment (Tsentral'nyy nauchno-issledovatel'skiy i konstruktorskiy institut toplivnoy apparatury avtotraktornykh i statsionarnykh dvigateley)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 126

TOPIC TAGS: speed regulator, gas turbine engine

ABSTRACT: This Author's Certificate introduces: 1. A direct rpm controller for low-power gas turbine engines. The unit contains an actuating mechanism made in the form of a nozzle which interacts with a flat valve located in the arm of a balanced spring-loaded centrifugal weight mounted on the cross connection of the power shaft. Construction is simplified and friction is reduced by locating the nozzle and the fuel channel in the power shaft. 2. A modification of this device which may be adjusted during engine operation by using a spring which acts on a lever and is equipped with a screw for varying tension.

Card 1/2   UDC;   621.438-531.6-552.9

ACC NR: AP6015713

1—nozzle; 2—flat valve; 3—weight;
4—power shaft; 5—spring; 6—screw
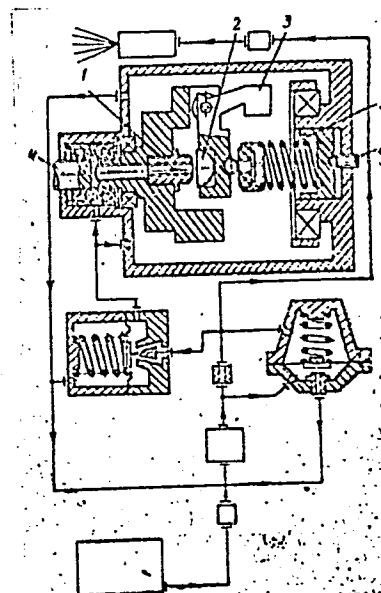
SUB CODE: 13, 21/ SUBM DATE: 04May64

Card 2/2

Chernetsov, I. G.

CHERNETSOV, I.G.

Therapeutic value antireticular cytotoxic serum in peptic and
duodenal ulcers. Medych.zhur. 19 no.2:90 '49.   (MIRA 10:12)

1. Z terapevtichnoi kliniki Kuybishevs'kogo medichnogo institutu.
    (PEPTIC ULCER)   (SERUM)

USSR / Human and Animal Morphology (Normal and   S-2
          Pathological). The Peripheral Nervous System.

Author : Chernetsov, I. G.
Inst   : Kursk Medical Institute.
Title   : Changes of the Intramural Nervous Apparatus in an
          Ulcerated Stomach.

Orig Pub: Sb. tr. Kurskiy med. in-t, 1956, vyp. II, 266-269.

Abstract: Near the ulcer, there appear shriveled nerve cells
          and their nucleii, varicose swellings, fragmenta-
          tion and disintegration of nerve fibers. At a
          distance from the ulcer, changes in the nerve ap-
          paratus are not pronounced. With the saturation
          of the organism by thiamine, the appearance of
          nerve element irritations in the ulcerous region
          decrease.

Card 1/1

CHERNETSOV, I.G. [CHERNETSOV, I.H.]

Treating ulcers with Bogomolets serum [with summary in English]
Fiziol.zhur. [Ukr.] 4 no.3:424-427 My-Je '58   (MIRA 11:7)

1. Kurskiy medichniy institut, kafedra gospital'noi terapevtichnoi
kliniki.
          (PEPTIC ULCER)
          (ANTIRETICULAR CYTOTOXIC SERUM)

CHERNETSOV, I.G., dotsent

Case of subacute septic endocarditis in the elderly. Sbor. trud.
Kursk. gos. med. inst. no.13:441-442 '58.   (MIRA 14:3)

1. Iz gospital'noy terapevticheskoy kliniki (zav. - dotsent I.G.
Chernetsov) Kurskogo gosudarstvennogo meditsinskogo instituta.
                    (ENDOCARDITIS)

CHERNETSOV, I.G., dotsent

Case of undetected diabetes mellitus. Sbor. trud. Kursk. gos. med. inst. no.13:443-444 '58.   (MIRA 14:3)

1. Iz gospital'noy terapevticheskoy kliniki (zav. - dotsent I.G. Chernetsov) Kurskogo gosudarstvennogo meditsinskogo instituta.
(DIABETES)

CHERNETSOV, I.G.

Pathogenic activity of thiamine in gastric and duodenal ulcers
[with summary in English]. Vop.pit. 18 no.1:41-45 Ja-F '59.
(MIRA 12:2)
1. Iz gospital'noy terapevticheskoy kliniki (nauchnyy rukovo-
ditel' - prof. F.K. Men'shikov) i kafedry patologicheskoy anatomii
(nauchnyy rukovoditel' - prof. A.S. Brumberg) Kurskogo meditsin-
skogo instituta.
        (VITAMIN B1, DEFICIENCY, compl.
            peptic ulcer (Rus))
        (PEPTIC ULCER, etiol. & pathogen.
            vitamin B1 defic. (Rus))

CHERHETSOV, I.G., dotsent (Kursk)

Medical and prophylactic importance of thiamine in peptic ulcer
of the stomach and duodenum. Kaz.-med.zhur. 40 no.2:78-79
Mr-Ap '59.   (MIRA 12:11)
        (THIAMINE)   (ALIMENTARY CANAL--PEPTIC ULCER)

CHERNETSOV, I.G., dotsent

Difficulties and mistakes in the recognition and treatment of visceral syphilis. Kaz. med. zhur. no. 4:53-54 Jl-Ag '60.
(MIRA 13:8)

1. Iz gospital'noy terapevticheskoy kliniki (zav. - dotsent I.G. Chernetsov) Kurskogo meditsinskogo instituta.
(SYPHILIS)

CHERNETSOV, I.G., dotsent

Diseases of the gallbladder; according to data of the therapeutic
department of the province clinical hospital. Sbor. trud. Kursk.
gos. med. inst. no.16:165-167 '62.   (!IIRA 17:9)

1. Iz gospital'noy terapevticheskoy kliniki (zav. - prof. A.I.
Matosyants) Kurskogo meditsinskogo instituta.

CHERNETSOV, M. M.

CHERNETSOV, M. M. — "Investigation of the Stability of Lumber under Tension
Perpendicular to the Fibers." Min Higher Education USSR Moscow, 1955.
(Dissertation for the Degree of Candidate in Technical Sciences).

So.: Knizhnaya Litopis', No. 7, 1956.

CHERNETSOV, M.M., inzhener

Testing wood for its tensile strength across fiber. Der. prom.
6 no.3:17-18 Mr '57.   (MLRA 10:5)

1. Moskovskiy lesotekhnicheskiy institut.
                (Wood--Testing)